

WHAT IS CLAIMED IS:

Sub B1
1. A method of relocating a first file, having portions on-disk and portions migrated to remote storage, to a second file in a computer system, comprising:

5 allocating space for said second file corresponding to said on-disk portions of said first file;

relocating said on-disk portions of said first file to the corresponding portions allocated for said second file; and

updating metadata, previously generated for use with said first file, for use with said second file.

10

2. A method according to claim 1, wherein said first file and said second file are co-located on the same volume.

15

3. A method according to claim 1, wherein said first file and said second file are located on different volumes.

20

4. A method according to claim 1, wherein a first file server services a first volume having a first file, said first file with portions migrated to remote storage, and wherein said first file is relocated to a second file for storage in a second volume serviced by a second file server.

25

5. A method according to claim 4, wherein said metadata is passed from said first file server to said second file server for use in connection with said second file.

6. A method according to claim 1, wherein said relocating is a move operation.

7. A method according to claim 1, wherein said relocating is a copy operation.

30

8. A method according to claim 1, wherein said first file is deleted after said relocating.

9. A computer-readable medium having computer-executable instructions for instructing a computer to perform the method recited in claim 1.

10. A data structure stored on a computer readable medium for storing metadata relating to a relocated file's migration characteristics, comprising:

an identifier identifying the relocated stream of data;
data representative of a storage service used in connection with the migrated portions of said relocated files; and
data representative of the memory mappings of said relocated file.

10

11. A data structure according to claim 10, further comprising temporal data relating to said relocated stream of data.

15

12. A data structure according to claim 10, wherein said data structure is formatted according to a scriptable interface capable of being incorporated into World Wide Web components.

20

13. A data structure according to claim 10, wherein said data structure is formatted according to at least one of extensible markup language (XML), distributed component object model (DCOM) and Java.

25

14. A modulated data signal for carrying information encoded in a data structure as recited in claim 10.

15. An application programming interface (API) for use in a computer system, whereby said interface provides a standardized way to communicate metadata, representative of a file's distributed storage relationships, among file servers.

30

16. An API according to claim 15, whereby said interface provides a standardized way to communicate information about portions of a file that have been migrated to remote storage.

17. A computer system, comprising:

a source file, having portions migrated to remote storage;

a target file, wherein said source file is to be relocated to said target file; and

5 an application programming interface whereby said interface provides a standardized way to relocate said source file

18. A computer system according to claim 17, wherein said API further provides a standardized way to update migration metadata, formerly describing migration characteristics of said source file, to describe migration characteristics of said target file.

19. A computer system according to claim 17, wherein said API further provides a standardized way to communicate migration metadata, from a first server to a second server for use with said target file.

20. A computer system according to claim 17, wherein said source file and said target file are located on the same volume.

21. A computer system according to claim 17, wherein said source file and said target file are located on different volumes.

22. A computer system according to claim 17, wherein said target file is serviced by an second HSM system that is different from a first HSM system servicing the source file, and wherein said second HSM system generates metadata for the relocated target file.

23. A computer system according to claim 17, wherein a file server servicing said source file is different from a file server servicing said target file.

24. A computer system according to claim 17, wherein said source file is to be moved to said target file.

25. A computer system according to claim 17, wherein said source file is to be copied to said target file.

004280" T 9854960